



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/632,795      | 08/04/2003  | Duk-Yong Kim         | P56939              | 5556             |

7590 11/22/2005  
Robert E. Bushnell  
Suite 300  
1522 K Street, N.W.  
Washington, DC 20005

EXAMINER

GILMAN, ALEXANDER

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2833

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                     |              |  |
|------------------------------|---------------------|--------------|--|
| <b>Office Action Summary</b> | Application No.     | Applicant(s) |  |
|                              | 10/632,795          | KIM ET AL.   |  |
|                              | Examiner            | Art Unit     |  |
|                              | Alexander D. Gilman | 2833         |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-5,8,9 and 11-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,8,9,11-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/13/2005</u> . | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 2833

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 5, 8, 9, 11, 13, 14, 16, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryman in view of European Patent Application (EP 0 746 051) and Kojima et al or Monnett.

With regard to claims 1,4, 9, 12, 13 17, Ryman (US 6,721,155) discloses a bias-T apparatus comprising: a housing ( 12) comprising an input connector (15) to be connected to a groundbase transceiver station and an output connector (16) to be connected to an antenna, said input connector and said output connector integrally formed at opposite sides of the housing, the housing having a housing hole and a fixing hole, the housing hole being formed longitudinally in the housing, the fixing hole connected perpendicularly to the housing hole; a center conductor (20) inserted in the housing hole and including a first conductor and a second conductor, which have a first connector pin and a second connector pin, respectively, the first connector pin and the second connector pin being respectively inserted inside of the output connector and the input connector, thereby enabling electric connection of a signal between the input connector and the output connector; and a fixing pin having a first end (30) connected perpendicularly to the center conductor and a second end (34) inserted in the fixing hole, so that direct current power can be supplied from the second end to the output connector.

Ryman explicitly do not disclose the conductor shaft being inserted in the reception tube so that the first conductor and the second conductor are assembled with each other (and function as electrode plates of

Art Unit: 2833

the capacitor, according to the Specification, p. 9, lines 5, 6), while Ryman disclosing the capacitor structure claimed but applied to the component 14. (col. 6, lines 51-54).

European Patent Application (EP 0 746 051) disclose (Fig. 2, 3, 5 the conductor shaft (PF) being inserted in the reception tube (CC) so that the first conductor and the second conductor are assembled with each other

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Ryman with the capacitance device, as taught by European Patent Application (EP 0 746 051), to simplify the capacitive mechanism.

With regard to claims 2, 5, 14, Ryman discloses the housing has a recess (recess receiving 14).

With regard to claim 16, Ryman discloses a gas tube arrester (60) and diodes.

Claims 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ryman in view of European Patent Application (EP 0 746 051) and further Kojima et al or Monnett

Ryman-European Patent Application (EP 0 746 051) do not disclose anodization one of the reception tube or the shaft.

Kojima et al (US 6,719,813) and Monnett (US 6,791,821) disclose a solid electrolytic capacitor with galvanic anodization (col. 2, lines 66-67 through col. 3, lines 1-3).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Ryman with the capacitance device, as taught by Monnett or Kojima et al, to achieve the required capacitive operational parameters.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ryman in view of European Patent Application (EP 0 746 051) and further in view of Sato et al.

Ryman when modified by European Patent Application (EP 0 746 051) disclose all of the limitations as applied to claims 4, 12, above but does not disclose the EMI filter using coils and dielectric materials.

Sato et al (US 5,206,779) disclose EMI filter using coils and dielectric materials (Fig. 5).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Ryman with the EMI filter, as taught by Sato et al, to effectively

Art Unit: 2833

suppress the EMI noise.

***Response to Arguments***

Applicant's arguments with respect to claims 1, 3, 4 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander D. Gilman whose telephone number is 571 272-2004. The examiner can normally be reached on Monday-Friday, 10:30 a.m. - 8:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on 571 272-2800 ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2833

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

11/12/2005

*Alex Gilman*  
**ALEXANDER GILMAN**  
**PRIMARY EXAMINER**